PRINCETON

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PART ONE

Princeton

PART TWO

PREFACE

There is no more important task confronting us as a nation in the new world upon which we are entering than that of education, and particularly of higher education. The whole vigor and sanity of the coming generation depends upon the kind of training we are able to give those boys of today who are to become the leaders of men tomorrow. We must have the necessary machinery and equipment to furnish to the nation a group of men capable of recognizing the truth, and possessing the courage to maintain and defend it at all hazards against the ignorance of the unenlightened on the one hand, and the sophistries of the vicious on the other, who through lack of any education, or because of the wrong kind of an education, are the natural foes of all social welfare and progress.

To perpetuate and reinforce the influences which proceed from this place, our present financial resources must be adequately increased. To pay our teachers a living wage, to relieve them of the daily anxieties which fret and fray the nerves, to enable them to devote their fresh energies and enthusiasm to their classroom work,

to create an *esprit de corps* which shall impart a new spirit to teaching activities, to safeguard the teaching profession itself, so that it may not come to be regarded as an impossible vocation for a man of spirit and ambition,—this is our first and most urgent duty. In addition we must be in a position to attract to Princeton the best teachers in the country; to hold those who at present are of incalculable value to the university because they have discovered the secret of giving life to knowledge; to increase the number of our faculty so as to give to our students more individual and particular attention according to our preceptorial method of instruction which has proved its worth by its marked success. We must give to both teachers and students alike increased facilities in laboratory and library equipment. We must be able to open up to our undergraduates the new fields of knowledge, as fast as the new world itself opens before us and flings to us its challenge. We must be in a position to plan such a comprehensive program of studies that our students will come to have an enlarged and sympathetic interest in their own human kind and feel a quickening sense of responsibility to serve their day and generation as men conscious that life in its supreme significance is of the nature not of a self seeking career but a mission, in the realization of whose end the welfare of the

many is of more concern than the prosperity of the individual.

A university with such aims and purposes is the servant of the nation. It is in this sense that we wish to maintain our position and function in the educational world as a national university, and to preserve throughout our campus life the atmosphere of patriotic loyalty and devotion. Patriotism is not a sentiment confined to periods of national peril and possible disaster. It is a devotion born of the appreciation that our country needs and has a right to our services at all times. It shall be our constant aim to lead our students to the recognition of the fact that their university privileges imply corresponding obligations, and that, if they carelessly ignore these obligations, they will fail lamentably not only in the duty which they owe to themselves, but in the duty which they owe to their country as loyal patriots, and to mankind at large as citizens of the world.

The nation's peril has certainly not ceased with the signing of the armistice and the treaty of peace. Our country is in a sense always in danger, always dependent upon the power and wisdom of her right-minded citizens who stand in readiness to uphold her traditions and defend her honor and integrity. It is my fondest hope for Princeton that in the years to come she may continue to be a conspicuous center of patriotic

propaganda, so that the prevailing and dominant spirit of the place shall have such compelling power that every undergraduate will insensibly come to relate his daily activities to the national need and demand for enlightened minds, devoted to the patriotic task of the service of mankind.

We make an appeal therefore to you, the friends of Princeton, in the following pages, to help in this great undertaking, and to share with us in an investment which shall be permanently productive through generations to come of those human values which we most highly prize,—intelligence, wisdom, character and the finely tempered spirit which is steadfastly persevering in the common routine and richly resourceful before the critical emergencies of life.

JOHN GRIER HIBBEN.

Princeton, N. J., August 11, 1919.

PART ONE

CHAPTER ONE

Why Princeton Needs Endowment

The University has not embarked upon any plans of vague expansion. It does not contemplate any sudden or large increase in enrollment. It is making plans only to take care of its natural and steady growth for the next decade. It does not propose to establish any schools in addition to the Graduate School and the School of Engineering already in existence, and the School of Architecture, an extension of one department in the college of liberal arts. It is aiming merely to attain the maximum of usefulness possible within its particular sphere.

To do this, however, it needs a very considerable increase in endowment first, to stabilize, or put on sound financial basis, its present establishment in view of the greatly increased cost of education, and secondly, for purposes of development.

Development

Never have the universities been submitted to a more serious test than during the recent war.

In the light of this experience, the Princeton curriculum was thoroughly revised. This revision of the curriculum and the survey of the departments, with provision for the normal growth of the University for the next eight or ten years, indicate that important additions must be made to the present teaching staff. Certain departments of the University need to be strengthened and their facilities largely increased, due to the increased demand for men trained in these fields. Such, for instance, are the cases of the School of Engineering and the Department of Chemistry, whose facilities even before the war were inadequate, and whose especial needs will be presented later in a more detailed manner.

Additions to Staff

The war has likewise decidedly changed the world in which we live and much extended its boundaries. It will therefore be necessary to introduce into the curriculum a number of subjects not previously taught. This is particularly true in the fields of political science and government, in history, in economics and social institutions, and in the modern languages.

Effects of the War

In the past a considerable number of Princeton men have entered the consular and diplomatic service of the United States. The plans of the University

Chair of Diplomacy

contemplate increasing this number of men who will give intelligent and disinterested service as American representatives abroad. To do this, a chair of diplomacy and international relations must be created.

Chair of South American History and Institutions

The recognition of our full responsibility to the other nations of the Western Hemisphere clearly calls for the establishment of a chair on South American history and institutions, to train men in the political, commercial and educational progress of South America, and to bring about better understanding and more cordial relations with the United States.

Chair of Economic Geography

In the Department of Economics and Social Institutions a chair of economic geography is needed both to prepare men for most effective work in the consular service and in the widening sphere of foreign commerce, and to give them a better knowledge of modern international relations.

Chairs of Slavic and Asiatic Languages and History

In the Department of Languages more emphasis must be laid upon the teaching of the living tongues and the institutions, literature and history of the new nations, such as the Poles, Czechoslavacs, Jugo-Slavs and the Russian. Considerable expansion of the present course of study is here demanded, particularly a chair of Slavic languages and in-

stitutions. Similarly, there is need of a chair or chairs of Asiatic history, languages and literature.

These new chairs are typical of expected future developments but are not included in the present estimates for endowment.

Other departments and phases of the University's life which call for important increases in funds will be dealt with later under special heads. Careful computation indicates that this necessary development of the University will require the income on an endowment of $8,000,000.

Stabilizing

The Most Pressing Need

By far the most pressing need of the University, however, is that of stabilizing the University's present establishment. This will call for about the income on $6,000,000. A consideration of the recent history of Princeton's expansion, of the development of education in this country, and of the shrinkage in university endowments due to the decrease in the purchasing power of money, will help to make the reasons clear.

Princeton's Recent History

In the twenty years from 1895 to 1915 Princeton's entire enrollment increased from 1109 to 1643. During the same period she very largely extended her functions. In 1896, on the one hundred and fif-

tieth anniversary of her foundation, the College of New Jersey, as it was then officially called, became Princeton University. This change implied especially the development of a strong graduate school and the providing of instruction in all the higher branches of advanced university work. Necessarily such instruction was relatively more expensive than collegiate teaching, since it called for a faculty of highly trained specialists in various departments. It likewise demanded very much extended library and laboratory facilities. This transformation was therefore accompanied by a very large increase of budget.

In 1905 the University introduced the preceptorial method of instruction which proved itself so important a factor in the development of effective teaching. This likewise called for an addition to the faculty of about fifty assistant professors of special qualifications.

Growth of Budget

To meet the needs of the growing number of students and this extension of the University's work the budget of the University was increased from $157,893.77 in 1895 to $847,711.29 in 1915. In the seven years from 1905 to 1912, the budget had nearly doubled, having been increased from $455,994.79 to $831,538.84. And meanwhile, in the way of permanent improvements, the physical and natural science laboratories, which are con-

sidered models of their kind, had been erected, and very important additions had been made to the University library.

These buildings had been erected and the cost of educating the larger number of students had been borne by trustees or alumni without any appeal for outside assistance, though in the later years of that period additional gifts from the alumni were necessary to meet current expenses; and it was even then felt that it was necessary to raise a considerable endowment. Plans were made with this end in view in 1916 and 1917, and a committee appointed. But with the country's entry into the war Princeton did not wish to appeal for endowment in the period of crisis, and the plan was temporarily abandoned.

The War and Princeton's Finances

Princeton's service to the nation during the war was made at a very heavy financial sacrifice. The University took no profit from the government and the contracts made for the use of buildings, and for providing food, were designed to cover only maintenance costs. The patriotic response of her students cut her enrollment in half, and left many of her dormitories, which are one of her sources of income, vacant. Likewise the return from tuition fees was virtually cut in half. Although the University adopted a stringent policy of economy, it was not possible to reduce the budget

in any similar proportions since professors and assistant professors were on permanent tenure. The University further wished to facilitate the entrance of members of its faculty into service and made provisions that they should do so without financial loss to themselves. During these years the alumni, through the Graduate Council, have contributed over $250,000 to these war deficits. The need of endowment is therefore now more pressing than ever.

Growth of University Incomes

The increase in Princeton's budget as shown above in the period since 1905 should not lead to the inference that she has been peculiarly fortunate, or that she has sufficient funds to carry on her work as a University. The figures of the larger universities of this country show that in many instances their incomes have increased 300 to 500 per cent in the decade from 1905 to 1915. The appended list of nineteen universities in the order of their income in 1915 will give an idea both of the increased expense of higher education and the relative position of these institutions with regard to their annual income. It should be remembered that these figures were those given in 1915, in other words before our entrance into the war and before the consequent increase in cost of living.

University	*Annual income 1905*	*Annual income 1915*
Harvard	$2,501,170	$3,805,428
Cornell	1,020,500	3,139,530
Minnesota	486,853	3,033,891
Columbia	1,586,309	2,920,031
Pennsylvania	580,599	2,903,162
Wisconsin	852,901	2,858,118
Illinois	858,697	2,844,541
California	943,837	2,784,024
Michigan	759,957	2,535,260
Chicago	1,186,075	2,132,012
Yale	900,929	1,777,134
Ohio State	477,610	1,466,120
Missouri	346,836	1,311,364
Nebraska	431,250	1,309,752
Leland Stanford, Jr.	800,000	1,235,000
Iowa State	440,406	986,513
Northwestern	533,394	935,370
Purdue	329,790	929,983
Princeton	402,533	839,316

This increased cost has placed a particularly severe strain upon privately endowed universities like Princeton.

Needed Increase of Salaries

The most serious need of the University today is an immediate increase of salaries for the teaching staff. How acute this question has become may be judged from the fact that three years ago a joint committee composed of members of the trustees' Committee on Curriculum and the faculty Con-

ference Committee considered what was already at that time a pressing problem and made a report from which we quote the following:

> "At a regular meeting on December 22nd, 1916, the subject of the salaries of the teaching staff of the University was presented, and there was a full discussion of the fact that the rapidly increasing cost of living in connection with the comparatively constant salaries of university teachers is creating a situation of serious moment for higher education throughout the country, and one with which Princeton is vitally concerned. It involves the efficiency of university teachers, their freedom from anxiety (an important factor in their efficiency), and the power of universities to attract good men to their faculties and to hold those who have proved most successful. The matter was deemed of such importance that a sub-committee was appointed to formulate a statement for presentation to the Board. This statement is presented, not because it is thought that the trustees are not alive to the situation, but because it seems desirable that the urgency of the matter should be emphasized, and that some of the important facts should be stated in concise and convenient form."

At this time the situation was already consid-

ered sufficiently serious to warrant the following recommendations:

> "It (the committee) realizes the many opportunities for expansion and enlargement of scope that are opening before the University, and the desirability of taking advantage, if possible, of some at least of these opportunities. It feels, however, that the matter of the salaries of the present teaching staff is of vital importance, and it therefore presents this statement, and urges upon the Board that in planning the work of the University, in shaping its financial affairs, and in efforts to secure endowment, this should be regarded as probably the most pressing need at present, if Princeton is to maintain a position of leadership among American universities."

The need of increase in salaries was based on a consideration of the movement of prices and salaries at Princeton University at that time.

The board of trustees felt that the problem called for speedy remedy and planned an endowment campaign. This had to be postponed because of our entrance into the war. That postponement has rendered a situation which was already acute, one which may without exaggeration be qualified as desperate. For in the meantime it has been impossible to take any general action because of the immediate sacrifices which the

University imposed upon itself to offer every assistance toward winning the war.

Average Salaries

The committee stated that the salary of instructors was $1200, with an annual increase of $100 up to $1400. Assistant professors received slightly more than this and when the assistant professor was placed on permanent tenure at Princeton, usually after five years, the minimum salary was fixed at $2000. The average professor's salary at that time was $3600, but thirty full professors were receiving less than $3000.

It has been possible in a few cases to raise individual salaries. Funds are not available, however, at present to make any substantial change. Indeed, although the trustees have been interested in this problem and fixed the minimum salaries for instructors and assistant professors on permanent appointments, no complete adjustment of the salary question has been made at Princeton since 1900. It is hardly necessary therefore to expatiate upon the situation.

Rise in Prices

It will be well, however, to recall a few facts. The tabulation of the statistics provided by the index numbers of the United States Bureau of Labor Statistics, the Annalist, Dun's and Bradstreet's, show that wholesale prices from 1896 to 1913, the year before the outbreak of the war, increased 58 per

cent. From 1913 through 1918, the increase was 99 per cent. Wholesale prices in 1918 thus averaged 217 per cent above prices in 1896 and 175 per cent above the average for the decade which closed with 1900.

It will be noted that the prices of various commodities were practically doubled in five years from 1913 to 1918.

If we take 100 as the average of retail food prices in 1913, we find that by April 15, 1919, they had increased 83 per cent. These are the figures of the United States Bureau of Labor Statistics. The fact of this increase in prices is familiar to all.

Salaries Stationary

It is difficult to fully appreciate the hardship that it has worked upon the members of the Princeton faculty. Their salaries were already recognized as very inadequate by the committee in 1916 before the latest and most serious rise in prices began. Their salaries have remained stationary and they have been called upon during the war to undertake heavier burdens of teaching than ever before. In the meantime, the salaries of salaried employees in business and in other fields have been increased. A large proportion of wage earners are now receiving more than our instructors and assistant-professors. It is impossible for faculty members to continue to live on even the modest scale which was theirs ten years ago.

Shrinkage in Purchasing Power

The consideration of the data prepared by the United States Bureau of Labor Statistics shows that an instructor at $1200 today can purchase with that sum only 40 per cent of what he could ten years ago and only 60 per cent of what he could six years ago. To other men, faculty members of higher rank, the pressure is no less serious. An assistant professor, who ten years ago at the age of thirty was receiving $2,000, and has since been promoted to a full professorship, at $3,500 let us say, is from the financial point of view worse off today than he was at that time. In the case of the members of the faculty with families, their children are now growing up and the demands upon them are far heavier than they were then.

Effect on Teaching Profession

This situation is already showing results, which those interested in education cannot view with equanimity. In the case of a large number of professors it has forced them to devote much of their time and a great deal of their energy to outside and often uncongenial tasks in order to support their families. This makes it impossible for them to continue their own researches and develop in their chosen specialities. The sacrifice of their energies to such pressing tasks has likewise lessened their efficiency and enthusiasm for teaching.

Some of them, unable to continue in academic

life because of their inadequate remuneration and readily able to command larger salaries in other fields, have left teaching against their wills and during the last four years Princeton has lost several men of promise for this reason.

Not only are some of our trained and successful teachers forced to leave their chosen professions, but it has been impossible to fill the ranks by men of equal training and ability. The best qualified young graduates cannot now be persuaded to enter upon this work. This situation is not something in the future. It is already here. In certain fields almost no qualified men are available for teaching positions. Chairmen of certain departments report that they have had requests for some eight or ten times as many men as they had upon their lists. A similar report comes from the Bureau of Appointments.

Professors in general do not expect the same financial reward that is given to men of like ability, training and proficiency in other learned professions. Their position and function are, however, such that they must be given a remuneration which will make it possible to live in an academic community and provide their children with the advantages which they themselves enjoyed.

And on Education in General

The members of the Princeton faculty would resent having any appeal made for them on sentimental

grounds. In justice to them, however, and in the interest of education in general, it is necessary that an immediate and very substantial increase in salaries at Princeton should be put into effect. It is necessary that the country at large as well as Princeton restore the professor to the relative standing in the professions which he enjoyed in 1900.

The Faculty and a Living Wage

In the last resort the character of a university depends upon the character of its faculty and President Hibben summed up the situation in his statement to the alumni at Commencement in 1919:

> "We have come to a point in the history of the University when these men must be paid a living wage. That is why we are starting this endowment, and the very first money given is to be set aside for increasing the salaries of the faculty. I am not in favor of erecting any building on our campus (unless it be a dormitory that yields income) until we have squared our account with the faculty."

CHAPTER TWO

Summary of Specific Needs

1. *Endowment of Professorships*

It is no secret that Princeton's existing endowment for professorships and assistant professorships yields only about $107,000 annually, while her salary budget reaches an amount more than four times larger.

At present there are in the University 59 professorships and 49 assistant professorships which are unendowed and the salaries of which therefore are drawn from general funds or from annual gifts. Before progress can be made in meeting the widened demands on Princeton's type of instruction, due to the increased significance of that instruction, the University must be freed, by endowment for existing chairs, from the drain on her current resources for general purposes.

It is hoped that some of these professorships may be endowed as memorials to Princeton men fallen in the service of the country during the European War.

2. *The Preceptorial Method of Instruction*

The most distinctive feature of Princeton's educational system has been the preceptorial method of instruction, introduced under President Woodrow Wilson in 1905.

The preceptorial method was made possible by the addition to the Princeton faculty of about fifty preceptors, who were experienced and inspiring teachers and authorities in their respective subjects. They were appointed with the rank of assistant-professor, and each was supposed to be especially qualified to act as "guide, philosopher and friend" to a certain number of students in their work.

The preceptor met his students in small groups of from five to eight, usually in his own rooms and discussed with them the work assigned by him for that week.

In a large university much of the instruction must necessarily be given by means of lectures, delivered before large groups of students. In such courses it is manifestly impossible for the lecturer to come into personal contact with or to give individual guidance to very many of his auditors. In many cases, he does not even know them by name, and under the old system there was no method of checking the student's work, or of encouraging him to work independently and to do his own thinking along the lines suggested. The

method was impersonal, formal and very often ineffective.

The preceptorial method of meeting the student at least once a week in an hour's conference made it possible to follow and encourage him in his progress, to give him experienced individual guidance, and to adapt the work to his needs and capacity.

This method proved itself highly successful. All the so-called "reading departments" of the University, such as those of philosophy, the literatures and languages, history, economics, and kindred departments introduced the method, and without exception they have testified that under it, it was possible to achieve results not formerly deemed possible in the rapid development of the student's interest and capacity for work.

The informality of the system made it possible to adapt it to the individual needs of the student, and friendly informal relations with a mature man gave the undergraduate the intellectual stimulus and the steadying guidance which he most needed. Not only did it make for closer relations between student and teacher, but also it served to bring the students more closely together in their intellectual interest and to develop their own *esprit de corps.*

An investigation carried on three years ago to test the results of the system, showed that grad-

uates in all parts of the country and engaged in all forms of activity, all virtually agreed that the association and training developed under the preceptorial method were among the most valued results of their college course at Princeton.

"Every institution in this country," said President Lowell of Harvard at the inauguration of President Hibben, "owes a debt of gratitude to Princeton for the preceptorial system. There is no college or university in this country whose thought has not been affected by that movement."

If this method of teaching is peculiarly effective, it is likewise expensive. It cannot be successfully carried out except by picked teachers of trained capacities. After fourteen years it has been thoroughly tested. The financial conditions of the University, especially since the war, have made it impossible even to maintain this method on its previous basis.

The departments in which it is used are unanimous in calling for its decided extension. To do so, and to give this individual attention to students and small groups of students, will call for additions to the faculty of all departments and in some cases, as in History and Economics, a doubling of the staff.

3. *Financial Aid for Students (Dormitory)*

Since the founding of the University, it has been a deliberate policy at Princeton to give financial aid to students of limited means. Under the system which has been operating for the last fifteen years this aid is granted on the basis of scholastic standing; a student of high standing in need of assistance will receive greater consideration than one of poorer standing; students who stand below the middle of the class receive no financial aid.

The University aids students either by partial remission of tuition or by the grant of scholarships, and in the case of ministerial candidates a small endowed fund is also available. The scholarships are endowed so that they constitute no actual drain on resources, but remission of the tuition fee constitutes a severe drain inasmuch as it means a postponement or loss of annual income. The University remits annually tuition fees to the amount of about $12,000.

This sum although covered in part by notes of recipients, in which they agree to pay back eventually the amount remitted, virtually constitutes an annual loss of income which the University can ill afford. The University particularly desires to encourage poor but deserving young men and to increase these grants of aid. To relieve the Uni-

versity of this burden, a substantial endowment is urgently needed.

This endowment may best be secured in the form of an additional dormitory providing rooms of moderate rental, the income from which would be set aside as a fund to cover the financial aid now given to needy students.

The proposal to erect such a dormitory would conform with the long settled policy of the University to bring all of its students into the democratic community life of the campus by housing them in campus dormitories. At present, even with sixteen of these it is not possible to carry out this policy completely because of lack of rooms.

The proposed dormitory might well be erected as a memorial to one or more Princetonians who lost their lives in the war.

4. *Regional Scholarships*

One of the main difficulties in extending the national scope of the University is the increased cost of education to young men compelled to travel long distances. The University particularly desires to increase its enrollment materially in the West, Northwest and South, especially among deserving young men, graduates of public high schools of moderate means.

To make it possible for such young men to

come to Princeton, the University intends to establish about two hundred scholarships, the income of which would be sufficient to meet the added cost of education at Princeton.

Such scholarships would provide for the holder's tuition, his travelling expenses, and in special cases for a part of his living expenses. The annual income of these scholarships would range from three hundred to six hundred dollars, which would make it possible for any young men of special ability to come to Princeton without additional cost to himself.

Such regional scholarships will be granted by competitive examination, thus bringing together a picked group of representative students from all sections of the country.

In most cases such holders of scholarships would return to take up their life work in the parts of the country from which they came, after four years of association with representatives of American constituencies in a distant part of the Union which would otherwise have remained strange to them.

It is believed that the training of such a group of men will help to develop a "back pull toward the center" and a stronger sense of common interests in broadly American ideals.

5. *Memorial Scholarships*

The Trustees and the Graduate Council of the University have decided that the most fitting spot in which to establish a memorial to the one hundred and thirty-seven Princetonians who laid down their lives in the service, is Nassau Hall.

This Hall is beautiful in itself and is perhaps more closely associated with the nation's history than any other college building in America.

It has been decided to remodel the entrance hall of this building and construct of it, directly in front of the large Faculty Room, another spacious room, fittingly panelled and decorated, in which would be preserved Princeton memorials and relics. On the marble panels of this hall will be carved the names of Princeton's sons who made the supreme sacrifice.

In addition, in order to perpetuate his spirit and memory, each will have a scholarship established in his name. The individual endowment of these scholarships will range from five to ten thousand dollars.

It is believed that a number of these scholarships will be made available to men who might otherwise have not been able to secure an education or to come to Princeton. They will be awarded to men in special sections of the country after the manner of regional scholarships.

6. *The University Library*

A library is the heart of a university. In 1896 the library of Princeton University contained 102,000 volumes; today it has 405,000 and yet it is by no means a properly equipped university collection. For unlike a college library, a university library must be adequately furnished in all the higher branches of study embraced in the university curriculum.

With the limited means available, and in spite of the careful and painstaking endeavor that has been expended, the library has been able to purchase only a fraction of all the books recommended by the various departments.

This situation is felt most painfully in departments which may expect large numbers of students as an indirect result of interest re-awakened or originated by the war.

It is evident, for example, that the historical, political, social, economic, and modern language departments will receive, and already are receiving, marked stimulus as a result of the war.

What the laboratory is to the departments of physical science, the library is to the other departments. The increased activity and interest in the latter will be made a living force of incalculable future usefulness, or will be starved to death now at birth, according to the expansion or the stricture of the library's resources.

There is scarcely a department of the library which does not need a large increase of endowment to enable it to carry on its work, and especially true is this of the departments mentioned in an earlier paragraph.

The absence of any large collections within reach of the University, such as in all probability would be the case were Princeton urban instead of rural, makes only the more imperative the need of assuring an adequate working equipment in her library.

7. *The Department of Chemistry*

America is the great source of raw materials, and prior to the European War supported to a large extent the European chemical industries. These in turn furnished many chemicals and finished products required by this country. Germany in particular had led in these industries and had acquired a commanding position in the fields of science that form their background.

When the war cut America off from many necessary products—the dye situation so frequently cited was typical of a whole group of problems—this country was confronted with the necessity of developing new industries to meet its needs, and these in turn required not only the extension of existing chemical industries, furnishing acids, alkalis, metallurgical products, and

intermediates of all kinds, but also enlarged laboratories for the control of the products and raw materials and for research and development. And obviously the demand for highly trained chemists was extraordinary, the universities almost without exception being drained of their expert chemical staffs. The technical experience thus gained is not to be discarded, but hereafter America must remain independent of foreign resources. Even before the war the demand for technical chemists highly trained in their science was far greater than the supply; the demands made on the science by America's present opportunity render the need of trained men even greater.

It is therefore with no selfish idea that Princeton desires large development of her equipment in the science of chemistry. Its vital importance to national industries, their helplessness without trained investigators, and the obvious duty of the universities to supply the national need in this direction, all justify Princeton's insistence on this feature of her plans for greater service to the nation. Not only is a new chemical laboratory with proper modern equipment a pressing necessity, but an enlargement of the staff of instruction and the foundation of several research fellowships in the newer applications of chemical science are imperative. The appointment of these

Fellows would, of course, also mean additional strength to Princeton's Graduate School.

8. *The School of Engineering*

The Department of Civil Engineering at Princeton as originally planned was part of a larger scheme for a School of Engineering in the John C. Green School of Science which has waited until the present to be carried out. That there is opportunity for national and even world service in an engineering school which will so organize its course that its students shall acquire a truer perspective of human life, a keener sense of values, and a higher ideal of their profession and their service to the commonwealth, seems to admit of little question.

Possessing already what many technical schools lack—the broadening influence of a university environment and the intimate intermingling of academic and engineering students, the Princeton Engineering School has in the university standards of liberal studies, its traditions, and its geographical advantage of location in the heart of an industrial region, the best possible basis for a development such as is proposed. The true type of an engineering education requires the elements that Princeton is pre-eminently qualified to contribute; for a professional engineer needs not only sound knowledge of fundamental

sciences and methods, but also the enlightenment of a liberalizing spirit such as pervades and dominates the University. It is not more engineers that are needed but a better kind of engineer; and the frank purpose of the present plan is to develop the best kind of engineers, men of vision, with disciplined minds, capable of leadership in the industrial world.

No class of men is doing a larger part of the work which is moving the world forward than the engineers. The material problems of civilization are largely engineering problems; and more particularly is this true at the present time when the scientific development of the resources of hitherto unexploited regions of the world lies within the power of American skill and energy, touched with a sense of humanity.

Plans were accordingly drawn after long and careful consultation with expert advice, and in general were accepted before the war as a development that was not only advisable but necessary. The war has reenforced those opinions to such a degree that any longer delay in putting the plans into execution would seem negligent. The proposal is to develop engineering education at Princeton in the five principal branches of Civil, Mechanical, Electrical, Mining and Chemical Engineering, requiring four years of undergraduate work in the fundamental principles of en-

gineering science leading to the degree of Bachelor of Engineering, followed by a fifth year of specialized work in one of the five branches of engineering and leading to the degree in that branch, of C.E., M.E., E.E., E.M., or Chem.E. These plans await endowment.

9. *The School of Architecture*

For several years there has been developing at Princeton a particular interest in the study of architecture with a view to the profession of architect. Steps have already been taken toward founding a School of Architecture. This has grown naturally out of the Department of Art at Princeton, rather than out of the technical departments as has been the case with so many schools of architecture in America. This fact gives its students a broad training in sculpture and painting which are so intimately allied with architecture, and also in languages, in politics and in science. It thus tends to transform into a fine art a profession which only too often has been merely technical and barren.

Leading American architects, themselves also artists, who have been consulted, agree enthusiastically that the influence of a School of Architecture thus liberally planned would not only be far-reaching in American life, but is something urgently called for by the situation of art in this

country. The course will carry men who have had the necessary undergraduate courses through at least two years of graduate study leading to the degree of architect or some equivalent, and would call into aid the Departments of Art and of Mathematics besides certain technical courses given in the School of Civil Engineering.

The plans include the extension and completion of the present unfinished Museum of Historic Art for the proper training of these students, as well as the enlarging of the staff of the Department. They had been so far advanced before the outbreak of the war that they may hardly be withdrawn.

10. *The Department of Astronomy*

The need of the Department of Chemistry, outlined in an earlier paragraph, is parallelled by the need of the Department of Astronomy.

It might be supposed that this science is somewhat remote; but the best evidence to the contrary is found in the part which astronomers were able to play in the recent war. Almost every observatory contributed members of its staff, and the Princeton Observatory had the honor of a 100 per cent record. The five members of the staff of September 1917 were a few months later engaged in war wark; the two computers (ladies) took commercial positions to release men

for military service; the Thaw Fellow, physically incapacitated for active service, became a computer at the Sandy Hook Proving Grounds; one of the faculty devoted his whole time to instruction of naval candidates for commissions, while the director of the Observatory entered the service of the War Department as a civilian engineer and was engaged in technical problems such as anti-aircraft defense and the navigation of airplanes. The results obtained in the latter field are of value in peace as well as war and have been communicated to the British Air Service, at their request. Thus in most of this war service the technical training of the astronomer was directly useful.

Astronomy is becoming more and more intimately related to the other sciences, notably to physics. Merely as one example of this relation, it may be pointed out that more than thirty years ago astronomers announced the existence of a gas, probably as light as hydrogen, in the sun, and named it helium. Today this gas is used to fill balloons and may solve the problem of the safe navigation of dirigible airships.

The preeminent position of the United States in the science of astronomy is generally recognized, and in the attainment of this national position, Princeton, though possessing but a modest equipment in comparison with the great western observatories, has borne a worthy part. The

great name in our tradition is that of Professor Charles Augustus Young whose researches on the sun won for him high distinction. The tradition which he established has been continued in recent years by the volumes of "Contributions from the Princeton University Observatory," and by numerous papers in scientific journals. Certain subjects have become the recognized specialties of this observatory, as for example the study of double stars in which it is not too much to say that a new branch of double-star astronomy has been created by the work done at Princeton. Mention may also be made of a theory of the evolution of these stars which has aroused much interest here and abroad.

If Princeton is to continue to do her part in the advancement of astronomical science an assured and increased income for the Department is necessary.

The great telescope of the Halsted Observatory is of excellent quality so far as the lenses and the optical parts are concerned; but the mechanical parts are forty years old and so unsuited to requirements of the present day that, of the various lines of work open to a modern instrument, hardly one in three can be here attempted. A new mounting of the lenses would remove this embarrassment and at least double the efficiency of the instrument.

Various minor accessories for the larger instruments are also needed, together with improvements which have long been desired but could not be purchased from the small annual appropriation the observatory now controls.

The removal of the observatory from its present unfavorable position in the center of the town to a freer location outside of it, and the construction of a modern building are much to be desired; but no appeal is made for this while the other needs of the University are so pressing.

The present staff of the observatory is insufficient to carry on the work of teaching and of theoretical research, and at the same time to use the great telescope at its full capacity. The provision of salary for a trained assistant would enable the telescope to be used when it now stands idle and would greatly increase the output of the observatory. A cogent argument for such a policy is found in the case of a brilliant student who came to Princeton some years ago as the Thaw Fellow and was later appointed a Procter Fellow. On receiving his doctor's degree in astronomy he was offered a position at the Mount Wilson Observatory, and Princeton was unable to retain him. His subsequent work has already won him distinctions usually awarded to much older men and he is likely to achieve lasting fame as an astronomer. From the point of view of science

at Princeton the limitations which prevented the retention of such a man amounted to a calamity.

It is also essential that funds be provided to secure the services of computers to handle the extensive and laborious numerical work incident to researches in progress and planned, and of stenographic and other clerical assistance such as is available to any business man even in a subordinate position. The lack of these facilities has been a serious hindrance.

Briefly then, the Department needs an endowment if it is to continue to progress, or even to hold its own, and to keep the members of the present staff. This situation is emphasized by the call recently extended by a sister university to the present director.

11. *McCosh Hall*

The completion of McCosh Hall was contemplated at the time of its erection in 1907. Since then the congestion of recitation and lecture rooms on the campus has become acute, and obviously will not grow less unless relief is afforded. At certain hours of the day every recitation and lecture room is occupied; several are overcrowded.

In addition, the expanding work of several departments is seriously hampered by the lack of adequate quarters, especially for preceptorial

conferences. As an example, the Department of History and Politics, one of the most important in the University, both as regards its present work and its future development, has for some time past been in urgent need of additional quarters in order to facilitate the work of its students under the modern methods of instruction pursued.

If there shall be growth in enrollment, as seems to be indubitable, the completion of McCosh Hall is a physical necessity which cannot be avoided.

An important feature of the proposed extension of McCosh Hall is the intention to provide in the building adequate private offices for professors who lack at present any quarters on the campus wherein they may meet students privately for consultation outside of the class rooms.

12. *Graduate Fellowships*

The increased difficulty of adequately supplying the ranks of the teaching profession is a commonplace in educational circles and has become the frequent topic of newspaper comment. Under present circumstances, few of the best seniors in our colleges and universities are giving any consideration as a career to the life of the professor, the pure scholar, the teacher of the liberal arts, the scientific investigator. Many a promising young student is compelled, because of the

financial question involved in the further prosecution of his studies, to relinquish his genuine preferences and give up all thought of carrying his studies on into graduate years.

Should this be allowed to continue, not only will there result a marked decrease in the supply of highly trained specialists on whose technical and theoretical knowledge so many purely commercial enterprises now largely depend, but, what is of far graver national importance, the whole future of American higher learning and American scholarship, in short the intellectual life of the nation, will be jeopardized.

Princeton has hitherto been able, by means of her system of fellowships, to maintain in her Graduate School a picked body of advanced students drawn by competitive process from every part of the country, who have been willing to resist the allurement of immediate business and commercial openings with their prospectively larger financial returns, and to prepare themselves for academic and scientific careers.

Her endowments for the purpose of encouraging higher studies and the advancement of learning have, however, suffered grave shrinkage in their purchasing value. A fund is urgently desired whereby they may be brought up once more to an adequate level.

13. *University Religious Work*

There has never been any endowment for our chapel services and the work of the Y. M. C. A. under the auspices of the Philadelphian Society. Consequently it is highly desirable that we should have some permanent fund which will assure the wider scope and greater effectiveness of the religious activities of the University. To provide for the University preachers at the Sunday morning services in the chapel and for the conduct of a weekday chapel throughout the year, together with the work of the Philadelphian Society, it has been estimated that a fund of $200,000 is needed. The authorities of the University recognize the importance and significance of making an especial effort at this time to maintain all of the Christian activities of the University in a manner befitting our religious tradition, and in recognition of the faith and hope of those who were the original founders of the College of New Jersey, later to become Princeton University.

CHAPTER THREE

Schedule of Desired Endowments

The following is a schedule of the endowments, the purposes of which have been described in the last two chapters.

1. *Increase of Salaries.* For the immediate increase of salaries to a point more commensurate with present conditions of living, an endowment of $2,000,000 is imperative.

2. *Professorships and Assistant Professorships.* In order to endow professorships and assistant professorships at present dependent on general funds, an endowment of $3,000,000 will be necessary. This makes no provision for new chairs.

3. *Preceptorial Method of Instruction.* In order to place the preceptorial method on a footing in which its potential value can be attained, an endowment of $1,000,000 is desired.

4. *Financial Aid for Students.* (Dormitory.) To erect the additional dormitory with which it is planned to relieve the University of the burden entailed in remitting the tuition fees of students with limited means, approximately the sum of $300,000 is necessary.

5. ***Regional Scholarships.*** In order to carry out the national purpose of the scholarship plan, a foundation of at least $1,000,000 is desired, in addition to individual memorial endowments perpetuating the names of Princetonians fallen in the service of the country.

6. *The University Library.* An extremely conservative estimate made by each department in 1917 showed that to maintain the collections in the various fields of literature, language, history, and science, would require the income of a sum not less than $600,000. This makes no provision for administration.

7. *The Department of Chemistry.* It is estimated that the sum of $2,000,000 would be necessary to erect and equip a new laboratory and to provide the requisite staff of instructors and fellows to place the department on a par with modern developments.

8. *The School of Engineering.* The carefully considered plans for completing the School of Engineering along the lines suggested elsewhere in these pages call for a fund of $3,000,000 to cover buildings, equipment and maintenance and to provide necessary additions to the staff.

9. *The School of Architecture.* The plans for this development ask for the expenditure of $350,000.

10. *The Department of Astronomy.* The

proposed plans for the equipment of the Observatory and for the increase of the staff call for a sum not less than $250,000.

11. *McCosh Hall.* It is estimated that the completion of an additional wing of McCosh Hall would cost in the neighborhood of $250,000.

12. *Graduate Fellowships.* An additional income of $15,000 for the increase of existing fellowships is required to meet the effect of present conditions on the value of stipends. This means a special foundation of $375,000. It makes no provision for additional fellowships.

13. *University Religious Work.* It is estimated that a fund of $200,000 will be necessary to assure the wider scope and greater effectiveness of the religious activities of the University.

Summary of Endowments

1. Immediate increase of salaries..	$2,000,000
2. Professorships and assistant professorships	3,000,000
3. Preceptorial Method	1,000,000
4. Financial aid for students (dormitory)	300,000
5. Regional scholarships	1,000,000
6. The University Library (minimum)	600,000
7. The Department of Chemistry..	2,000,000

8.	The School of Engineering	3,000,000
9.	The School of Architecture.....	350,000
10.	The Department of Astronomy.	250,000
11.	Extension of McCosh Hall.....	250,000
12.	Graduate Fellowships	375,000
13.	University Religious Work....	200,000
		$14,325,000

PART TWO

CHAPTER FOUR

Geographical Distribution of Students

Higher Education in the United States

The founding of institutions of higher learning in America has been left entirely to individual states, localities, and denominations, or to the generosity of philanthropists. The interest of the American people in education has from the first been keen, and fortunately there is no lack of such institutions. The United States has a larger number of universities and colleges in proportion to its population than any European nation.

Already in 1902 there were in the United States 700 institutions of very unequal grade, calling themselves colleges or universities. The state of Ohio contained forty such colleges or nearly twice as many as the entire German Empire. Missouri, Pennsylvania, Tennessee and Iowa contained considerably more than Germany of before the war. This has had the advantage of making it possible for young men of nearly every

section of the country to obtain collegiate instruction without traveling far from home.

Localization of Higher Education

So important had this localization of our higher education become that the General Education Board made it the subject of special consideration in its report for 1902-14.

Is a University of National Scope Impossible?

In its study of the laws of college growth in America the Board's report states that we can have only such a national system as results from adding together the separate state systems.

Although the authorities at Princeton admit that this tendency to localization is strongly operative, they feel convinced that, in certain cases at least, the subject of higher education ought to be approached "from the standpoint of the Union as a whole, not from that of separate states or localities."

Restricted Areas of Influence of American Colleges

The General Education Board further states:

> "The circle from which a college chiefly obtains its students is rarely two hundred miles, and usually not over one hundred, in diameter. If we draw circles around each American college fifty and one hundred miles from its halls, and trace every student to his home, we shall most frefrequently find the homes of the majority

> within these circles. Almost invariably the homes will be thick about the base of the institution, thinning out with distance. This marked tendency is equally strong in all sections of the country."

It is quite true that there is such a tendency in American education. It can readily be explained on economic grounds. The cost of education to a young man increases directly with the distance, and the increased cost of education to those compelled to travel long distances is such as to make it impossible for any but young men relatively well-to-do.

The report continues: "Moreover state lines have likewise counted heavily in determining the area of college or university influence. The state line is a formidable barrier."

Disadvantages of the System

The serious disadvantage of this condition has been the fact that there are very few institutions in our country where the young man leaves his local atmosphere and puts himself into touch with a body of students who represent America in its wider sense, and in which the spirit of the instruction is not in any sense influenced by the desire to satisfy utilitarian claims or local demands.

Princeton is one of the relatively few institutions possessing, she believes, particular advantages in this regard. In her further development

it is intended to work for a still larger representation from the sections of the country not now adequately represented in her student enrollment.

Princeton founded in Center of Colonies

The founders of Princeton University contemplated this larger usefulness when in 1746 they located the college in what was then the center of population. It was for this reason that they refrained from establishing it in any town or city of the Colonies, but chose as its site a village in the open country exactly midway between New York and Philadelphia. The college therefore still finds itself in what is the most densely populated section of America. It is also within four hours' ride of the National Capitol at Washington. Already in 1772 Fithian speaks in his Journal of there being students in the college "from almost every province of the continent," and this statement is corroborated in the correspondence of President Witherspoon. Throughout Princeton's history this feature has been noticeable.

Center of State line no Barrier

Princeton is one of the few institutions in America with a certain momentum that do not readily fall into the class of local institutions. The state line in her case is not a "formidable barrier." Although situated in New Jersey, the number of students from New Jersey itself is surpassed by

the number enrolled from New York and frequently by the number enrolled from Pennsylvania. In 1915-16, for instance, there were 535 students from New York, 336 from Pennsylvania, 333 from New Jersey. Important as distance is, it likewise has not been the determining factor in Princeton's enrollment. In 1915-16 there were more students at Princeton from Colorado than from Indiana or from Wisconsin, and as many from California as from Indiana. Twenty-two states were represented by more than ten students, Missouri being represented by 45, Minnesota by 20, Illinois by 48. Forty-six states and eighteen foreign countries were represented.

Nationalizing Enrollment

In its plans to make itself even more national in scope, Princeton is making a determined attempt to increase its enrollment particularly in the South, the Middle West and the West.

Regional Trustees

Regional trustees have recently been appointed to the board of trustees, so that these sections are now adequately represented in the governing body of the University.

Regional Scholarships

Princeton does not wish to have her students represent only one geographical section or one social stratum. She wishes to draw representative young men from all sections in increasing numbers,

especially able young men who belong to the class that could not now afford the expense of travel. To this end it is intended to establish a large number of regional scholarships in the South, the Middle West and the West, the income of which will be sufficient to make it possible for young men to come to Princeton for their higher education without increased cost to them.

Princeton aims therefore:

First: To bring together a body of picked students who shall represent, even more fully than in the past, all sections of the United States.

Second: To make the conditions of life in the University and the character of its instruction even more broadly national in spirit.

Conditions favoring Development of National Spirit

Aside from its historical traditions and atmosphere the physical conditions at Princeton are favorable to these ends.

It is situated in the country on a ridge amid beautiful natural surroundings, where the health of the students and their physical development are assured.

Easy Access to Great Cities

It is within ready access to great centers of population, like New York and Philadelphia, where the social conditions of modern life can be studied, as has been done in the past in university courses, such as those of social economics.

Spirit of Princeton is Spirit of her Students

The town of Princeton is small, with a population of about five thousand inhabitants. It is entirely dominated by the university life. The atmosphere in which her students live is that created by the students themselves, as would be impossible if the University were merely a part of a large center of population. The conditions of life and associations are those of the university campus and all students live with their fellows from various sections of the country in a student community which is very largely self-governing.

CHAPTER FIVE

Princeton's National Tradition

Princeton is not a sectarian institution. It stands on the broad basis of Christian liberalism. The charter creating the College of New Jersey in 1746 was exceptional for those days in its latitudinarian terms. The charter of 1748 was even more generous. It made the college for all time neither a church nor a state affair; and, attaching it to no denomination or region or locality, safeguarded its free development and devoted it broadly and simply to the promotion of "a liberal and learned education" to be vouchsafed henceforth to "those of every religious denomination" with equal liberty, "any different sentiments in religion notwithstanding."

Princeton Non-sectarian

Princeton is fortunate in that its history runs back into colonial days and that it was privileged to play an important part in the founding of the nation. The town and campus are therefore crowded with historic memories. In the Revolution it was the scene of the Battle of Princeton of which Nas-

Historic Memories

sau Hall was the pivot, and this famous old building was occupied by the British and American armies in turn. In this building the Continental Congress met at the close of the war. Here audience was given to the first foreign minister regularly accredited to the United States, and here General Washington received the thanks of the nation for his service in the Revolution.

Washington at Princeton

Washington himself was a frequent visitor. He maintained headquarters at Princeton during the summer of 1783, honored the college with a gift "in token of his esteem," and later sent his adopted son to Princeton.

1. *Princeton in the Service of the Nation*

The spirit which pervades her past is well expressed in one of the last addresses of President Grover Cleveland, delivered on the opening of the new Faculty Room in Nassau Hall:

> "I almost fear to speak here lest I may by some ill-selected word or ill-considered thought disturb the spell created by the associations of this place. I am profoundly impressed by the thought that the spirit which built our nation and which in Revolutionary days was here more than a visitant has not altogether departed, and that the consecration of this room by the apostles of liberty and free government

has not faded away. This spirit and this consecration span the chasm of more than a century of years and by mysterious guidance make easy the journey of our thought to the time when Washington and other immortals within these walls watched and nurtured the promise of a new Republic. To recall these things is to remember that we who have gathered in Nassau Hall today hold in trust her precious traditions and her heritage of splendid patriotism. . . . From these conditions arises an inescapable duty. This room has been changed to better suit the use of the University; but its spirit and atmosphere, derived from its distinguished past, cannot be changed without unfaithfulness. The teachers that meet in this room for counsel may adopt improved methods of education; but they cannot without recreancy change the current or purpose of Princeton's teaching."

Princeton in the Nation's Service

Nor was it the accident of geographical position that gave Princeton this prominence in Revolutionary days. To indicate her rôle briefly one cannot do better than to quote from President (then Professor) Woodrow Wilson's notable address, "Princeton in the Nation's Service," delivered in 1896 at the one hundred and fiftieth anniversary of its founding. Speaking of the early days, he said:

"One thing is certain; Princeton sent upon the public stage an extraordinary number of men of notable quality; became herself for a time, in some visible sort, the academic centre of the Revolution; fitted among the rest the man in whom the country was one day to recognize the chief author of the federal constitution. . . . It would be absurd to pretend that we can distinguish Princeton's touch and method in the Revolution, or her distinctive handiwork in the Constitution of the Union. We can show nothing more of historical fact than that her president took a place of leadership in that time of change, and became one of the first figures of the age; that the college which he led and to which he gave his spirit contributed more than her share of public men to the making of the nation; outranked her older rivals in the roll call of the constitutional convention, and seemed for a little while a seminary of statesmen rather than a quiet seat of academic learning. What takes our admiration and engages our fancy in looking back to that time is the generous union then established in the college between the life of philosophy and the life of the State.

"It moves her sons very deeply to find Princeton to have been from the first what they know her to have been in their own day, a school of duty. . . . Her rolls read

> like a roster of trustees, a list of the silent men who carry the honorable burdens of business and social obligation—of such names as keep credit and confidence in her. . . . It has been Princeton's work in all ordinary seasons not to change but to strengthen society, to give not yeast but bread for the raising."

In a sense this rôle was the natural outgrowth of the tradition that dated to colonial times. Even then the college was spoken of as a center of the new spirit of Americanism born of the French and Indian War. It had been strengthened in the stormy days that preceded the Revolution. President Witherspoon served steadily in the Continental Congress and with two other Princetonians signed the Declaration of Independence. The activity of Princeton's president doubtless served to render even more keen the spirit of her sons, and it is perhaps for this reason that we find the names of so many of her young graduates, like that of "Light Horse Harry" Lee, of the class of 1773, high in the rosters of the Revolutionary Army.

The impetus for patriotic service which had asserted itself so powerfully in the days of the Revolutionary War naturally made itself felt on the return of peace. The predominance of Princetonians in the Federal Convention is illustrated by the fact that ten of the twenty-five college

graduates in that body held Princeton diplomas; that the two rival plans debated were drawn up by William Paterson (class of 1763) and James Madison (class of 1771) respectively; that compromises were offered by two other Princetonians only to yield finally to the proposal of Madison. In twelve of the thirteen original states Princeton graduates were leaders in the conventions securing popular sanction for the national charter.

The outstanding rôle which Princeton had played in the days of the founding of the nation not only gave her a rich store of historic memories, but served also to create that spirit of service to the nation which has been exemplified in her later history. Its various phases can be studied in Princeton's record during the War of 1812, the Civil War, and the War with Spain.

The European War

As was likewise true of other educational institutions of the country the most recent and striking test of Princeton's patriotic spirit is to be found in her response to the nation's appeal in the European War. The University did not await the formal entry of the United States into the conflict to show where its sympathies lay. A majority of the faculty signed formal protests against the sack of Louvain, the destruction of the Cathedral at Rheims, and the sink-

ing of the Lusitania. President Hibben's scathing reply in 1914 to Professor Eucken, the German philosopher, on Germany's trespass in Belgium, was widely quoted. His denunciation of German inhumanity and his insistent demand for preparedness since 1914 aroused public attention as the message of few other private citizens had done.

Long before they could fight in their own army, Princetonians were working for or fighting in the armies of the Allies. On the Commission for the Relief of Belgium, organized before this country's entrance into the War, there were proportionately more men from Princeton University than from any other American institution of higher learning. The American Ambulance Field Service, organized by A. Piatt Andrew, of the class of 1893, naturally enlisted a large number of men from his college, four of whom received the French Médaille Militaire and twenty-five others the Croix de Guerre from the French Army before American troops reached France.

Scores of students left the University to volunteer in the service of the Young Men's Christian Association among our own troops on the Mexican Border, among Chinese soldiers in Peking, and with British and Indian forces in Mesopotamia. They were present at the fall of Bagdad and at the capture of Jerusalem.

When steps were taken to shape the voluntary

military courses given in 1916 for the first time at Princeton and correlate them with the work of the summer camps so urgently advocated by President Hibben, the University in answer to severe criticism officially replied that it was "trying in obedience to its cherished traditions to fulfil its obligations to the Nation as well as to the undergraduates on whose disciplined loyalty the country in time of emergency must rely."

The spirit of service to the nation expressed itself not only among the undergraduates but among the alumni as well. The University has kept a record of the alumni and students who gave all of their time to the government during the war and took part in some active branch of the nation's work. The records thus far received show that 4625 were in active service, with 1300 still to be reported. Of those whose reports are not yet received, it is known indirectly that more than half were enrolled. When the record is complete it will be found that considerably over 5000 Princeton men were in service.

The returns already filed indicate that close to 3000 Princetonians earned promotion to officer rank and served as such during the war. Among these were 4 brigadier generals, 4 colonels, 2 commanders, 37 lieutenant colonels, 5 lieutenant commanders, 161 majors, 321 captains, and 1475 lieutenants.

The records at present show that 231 were dec-

orated for distinguished service, and that 137 laid down their lives.

In February 1917, on severance of diplomatic relations, a volunteer Princeton Provisional Battery was organized under command of Captain (now Brigadier General) Stuart Heintzelman. Half the undergraduate body enrolled forthwith, 500 of them on the first day. By the end of April over 1000 undergraduates were drilling or otherwise receiving military instruction. Before Commencement, 741 had left college for active service or for officers' training camps. At that time the official university records showed that of an undergraduate enrollment of 1409, all but 15 were either already in service, or were drilling, or receiving other military instruction at Princeton.

The effect on the university enrollment was apparent in the following fall and winter. The customary undergraduate enrollment of approximately 1400 had dropped to 793. Practically all of the men old enough to enter the aviation schools or training camps had volunteered.

The Class of 1917

At the opening of the college year 1916-17 the senior class of 1917 had numbered 337 men. Three months after the declaration of war, at their Commencement 232 or 68.8 per cent were known to be in service. A year after graduation the percentage of this class had risen to 79.2 per cent, and

two years after graduation (June 1919) 323 or 96.7 per cent had been in some branch of service. This means virtually every man physically qualified. Of this class, 20 died in service and 20 were decorated for valor.

The Class of 1918

By June 1917, while the class of 1918 were still juniors, 173 of the 287 men in the class, or 60 per cent, had volunteered. At the opening of the next college year (1917-18) when this class had become seniors, 193 or 67 per cent were recorded as absent in service, only 94 having returned to college. By June 1918, 74 had completed the course but only 61 were present at Commencement to receive their degrees. By January 1919, or six months after graduation, 284 of the class had been in service, 7 had fallen and 7 had received decorations.

As accurately as could be figured from existing data in January 1918, 54 per cent of the undergraduates who had been in college at the break of diplomatic relations in February 1917 were in the service of the country. This accounts for practically all undergraduates old enough or physically qualified for service.

Faculty

Of the 184 members of the faculty in 1916-17, 80 (or 43 per cent) were in war service, more than half of these (48) in uniformed service. Twelve members of the forty-

eight received decorations, 3 were taken prisoners, 4 were wounded, and 3 died in service, 2 being killed in action and one dying of wounds received in action.

Graduate School

The preceding statistics refer to the faculty and the undergraduate body. The record of the graduate school is equally notable. Except a small handful exempted by government regulation, all graduate students in residence in 1916-17 and 1917-18 were in the military or naval service of the United States or in recognized government war work. A partial record of the graduate school shows that of the 107 graduate students in residence in 1916-17, 97 joined the training corps organized in the spring of 1917. Of these, in 1918, 80 were in the uniformed service of the United States, 4 in Y. M. C. A. work, 4 in ununiformed government service. Among them were 51 commissioned officers. Of the graduate students of 1917-18, 80 per cent are known to have been in service, and the record is still incomplete.

Aviation

As soon as this country declared war, the University put at the disposal of the government its entire equipment. Before the government could act, however, a group of alumni and friends, foreseeing the need there would be of trained aviators, immediately started at Princeton an aviation school which was con-

tinued until the government had perfected its plans and took charge of this branch of training. As a result of the start already made and the exceptional advantages offered, the government took over the school and established at Princeton one of the foremost ground-schools of military aeronautics in the country, which continued for over two years and from which more than 3700 aviators were graduated. The character and spirit of this work are evident in the record of the first class, graduated in midsummer of 1917, which numbered 27 men, all but two of whom were Princeton undergraduates. All of them became officers in the aviation service; 5 were killed in action; 3 lost their lives by accidents in line of duty; 4 became American aces; and 5 won decorations.

In order that the school might be comfortably housed, the University vacated two of its larger dormitories, gave it the use of laboratories and recitation rooms, and for two years its students were fed at the University Dining Halls.

Naval Pay Officers

The quadrangle of buildings which constitutes the Graduate College was turned over to the Naval Department for the establishment of a Naval Pay Officers School, where more than 1200 men were trained as officers.

Gas Warfare

For the study of gas warfare a research division of the Chemical Warfare Service was established in the Chemical Laboratory. A radio station of research was established as well as a bureau of medical research. The laboratories for the study of physics, engineering, chemistry and biology were therefore given over to government work.

Data for Peace Commission

The entire facilities of the university library were placed at the disposal of the National Board for Historical Research, and under Professor Dana C. Munro of the Princeton faculty chairman of the board, a corps of historians prepared at Princeton material for our State Department and for the use of the Peace Conference in Paris.

Summer Camps

On its own initiative, the University established courses for the training of men entering the Navy as well as the Army. During the two summers military camps were maintained on the campus. When the Students Army Training Corps was organized in the autumn of 1918, Princeton was able, in addition to the men training for the aviation and the pay officer corps, to accommodate about a thousand men preparing for the Army and Navy at the time the armistice was signed.

Variety of War Service

It would be impossible here to give a record of individual Princetonians who rendered important service; but it may be well to mention a few names merely to illustrate the diversity of the types of service which the University and her sons rendered to their country.

As President of the United States, Woodrow Wilson of the class of 1879 was Commander-in-Chief of the Army and Navy. It was under his leadership that the country entered the war and helped bring it to a victorious conclusion. He was a leader at the Peace Conference and with Mr. Lloyd George and M. Clemenceau was largely instrumental in formulating the peace which it is believed and hoped will mark a new era in history.

In the Princeton Physical Laboratory Professor Augustus Trowbridge of the University perfected a device for locating hidden enemy batteries and registering their calibre. This proved of such value behind the Allied lines that Professor Trowbridge was made Chief of the Sound and Flash Ranging Service of the Second American Army and was ordered abroad as Lieutenant Colonel of Engineers, serving in that capacity. For his work he was awarded the Distinguished Service Cross and the Distinguished Service Medal.

On the medical side, Brigadier General John

M. T. Finney (class of 1884), the well known surgeon and a trustee of the University, was appointed head of the Surgical Division of the Allied Hospitals. He received the Distinguished Service Medal and the Cross of the Legion of Honor.

The difficult problem of debarkation of American troops and their transportation to training camps in England was in charge of Lieutenant Colonel M. C. Kennedy, a classmate of Dr. Finney.

Mr. Raymond B. Fosdick (class of 1905), was head of the War Department's Commission on Training Camp Activities. He has recently taken up his new duties as American representative in the secretariat of the League of Nations.

Professor Joseph E. Raycroft of the faculty was chairman of the Athletic Division of this commission and had charge of the physical fitness of the men in the camps.

Princetonians were to be found in every form of service, military, naval, or civilian. They served on relief commissions, food and fuel commissions, in hospitals and ambulance work and in the Y. M. C. A. They were found in all parts of the world, in France, England, Belgium, Roumania, Russia, China, Italy, Greece, Serbia, Turkey, Palestine, Persia, Siberia and Manchuria; in the North Sea, the Atlantic, the Pacific,

and in South American waters; in the air, on land and sea, and under the sea.

Of hardly less importance than the work of the men in active service was that of Princeton's sons in the branches of humanitarian and social cooperation. It is only necessary to mention the aid and inspiration furnished to the American Red Cross by men like Mr. Cleveland H. Dodge and to the Y. M. C. A. by Mr. Cyrus H. McCormick, both graduates of President Wilson's class (1879). Mr. McCormick was also a member of the Mission to Russia in 1918.

Dr. Livingston Farrand (class of 1888), after serving abroad on the Tuberculosis Commission, is the present head of the American Red Cross (1919).

Paul van Dyke (class of 1881), served as Associate Director of the American University Union in Paris during the War. Henry B. Thompson (class of 1877), was Treasurer and a member of the Executive Committee of the University Union.

The spirit of service which permeated Princeton's board of trustees is illustrated by the fact that four members of that body, all graduates of the University, were members of the National War Work Council of the Y. M. C. A.

Princeton and the Nation's Life

Princeton has always prided herself on the broad character of her training. It is for this reason that

her graduates were prepared to serve in so many diverse fields during the national crisis. The same characteristic of her training has made it possible for her in times of peace to send out men into virtually every department of national life. Her history is therefore interwoven with that of every phase of the country's development and it is impossible to go back through American annals in politics, science, theology, or letters without somewhere crossing the path of her influence.

Two presidents of the United States, James Madison (class of 1771) and Woodrow Wilson (class of 1879) have been graduates of the college and a third president, Grover Cleveland (hon. 1897), was one of its devoted friends and trustees. Two vice-presidents and one chief justice of the United States have also been Princeton alumni.

Diplomacy

The annals of American diplomacy show that Princetonians have frequently represented their country in the capitals of Europe and Asia. Three times have graduates been ministers plenipotentiary at the Court of St. James, while the number of lesser appointments runs into scores. During the recent war, Princeton men were stationed in the American embassies at each of the Allied capitals. The most arduous neutral post, that at the Hague, was at first occupied by Henry van Dyke (class of

1873), and then by John W. Garrett (class of 1895). The present ambassador to Japan is Roland S. Morris, class of 1896.

The Law

The history of American jurisprudence is shot through with Princeton names, from Chief Justice Oliver Ellsworth and Justice William Paterson of the eighteenth century to Justice Mahlon Pitney of the present time. They are found in the records of bench and bar in nearly every state in the Union. In New Jersey half of the jurists who have occupied the seats of highest legal authority have been graduates of Nassau Hall; since 1776 twelve of the twenty-four attornies general of the State, thirty-one of the seventy associate justices, seven of the thirteen chief justices of the supreme court, and seven of the nine chancellors of the state have received their education at Princeton.

The Church

The history of the American church at home and abroad tells a similar Princeton story. Early American Protestant Episcopal bishops, like Clagget, Meade, McIlvaine, Johns, and Hobart, stand side by side with great leaders of the Presbyterian Church, like Edwards and Hodge, Alexander, Green, and Warfield.

Education

Not less characteristic are the scores, if not hundreds, of ministers of the gospel who, not only in religion but also in

education were pioneers, torch-bearers of liberal learning, founders or presidents of colleges in the South and West, patterned often after Nassau Hall in curriculum and sometimes in external form.

Mother of Colleges

Princeton has been a mother of colleges, among them Brown University and Dartmouth College in New England, Union College in New York, Washington and Jefferson College in Pennsylvania, the University of North Carolina, and Hampden Sidney College in Virgina. Several others were founded or first presided over by graduates of Nassau Hall. Four American colleges and universities and three theological seminaries have within recent years drawn members of the Princeton faculty to their presidential offices.

Foreign Missions

The story of foreign missions bears witness to Princeton's service in the double cause of religion and education. Hepburn (1832) and MacCauley (1864) in Japan, Nassau (1854) and Owen (1835) in India, Gulick (1825) in Hawaii, Baldwin (1841) and Wherry (1858) in China, are names that stand high in the pages of missionary history; and with these may be coupled that of Robert W. Gailey (1896), head of the "Princeton Center in Peking," the Chinese Y. M. C. A. organization

whose influence is spreading so widely and which is manned and financed entirely by Princeton. How strong is the call to such service is indicated by the fact that before the war there were more Princeton alumni living in China than in any other foreign country, virtually all of them engaged in branches of humanitarian service.

Literature

Princeton names have not been lacking in the history of American literature. From the days of Philip Freneau (1771), the poet of the Revolution, through Charles Godfrey Leland or "Hans Breitmann" (1845), down to Henry van Dyke (1873) and the later school of Booth Tarkington (1893), Jesse Lynch Williams (1892), and the present generation such as Ernest Poole (1902), and Maxwell Struthers Burt (1904), Princeton's authors seem to have caught and expressed different phases of the nation's life and spirit.

Science

In science, the writings of Benjamin Rush (1760) foreshadowed modern researches,while the names of David Hosack (1769), and Professors Torrey, Maclean and Stephen Alexander in the realm of natural sciences, Arnold Guyot, the geographer, Joseph Henry and Cyrus F. Brackett, the physicists, and Charles Augustus Young, the astronomer, are inevitably associated with Princeton class rooms and laboratories. Chemistry as a separate sci-

ence was first taught to American college students by Maclean of Princeton, the pupil of Priestley, himself the teacher of Silliman; and to the same professor fell the first course in natural science ever placed in an American college curriculum.

Princeton Characteristics

These distinctions belong to the University's intellectual history. There are others which relate to the present day and to its material side. Apart from the appealing natural beauty of its campus and of its setting within a girdle of green fields and woodland, the characteristics of Princeton are the signal stamp of the communal dormitory life that marks the daily existence of the place, its highly developed form of undergraduate self-government, its honor system so closely treasured by the student body, its well known preceptorial method of instruction combining the advantages of the large university with the intimate association between teacher and pupil that characterizes the smaller college, and finally its residential graduate college, unique in America, and not only affording to graduate students at Princeton adequate living quarters but also giving them a common scholarly life and the beneficent spur of daily democratic contact with one another and with the University as a whole. These were the features of Princeton's graduate college which

appealed with peculiar strength to that sturdy American, Ex-President Cleveland, in whose memory the great tower of the graduate college was erected by the subscriptions of the people of the United States.

2. *Princeton's Organization and Administration*

Within recent years changes have been made in the administration and organization of Princeton, all of which have had as their aim a higher degree of cooperation.

The fundamental conception underlying Princeton's plan of organization is that it is a university consisting of trustees, faculty, alumni and students. To do its work most effectively there must be the closest cooperation between these four factors.

The Board of Trustees

The board of trustees consists naturally in very large part of Princeton alumni. They represent nearly all of the important professions and careers, and include educators, doctors, divines, men of affairs, lawyers, and engineers. Various religious denominations are represented. Until 1901 the board was self-perpetuating. In order that alumni, however, might be more directly represented, in that year Princeton initiated the system of hav-

Alumni Representation

ing members elected to the board by vote of the alumni. At present there are five such alumni trustees, each elected for a term of years.

National Character

The election of alumni trustees made for democracy in representation. The board has recently taken action to make the governing body of Princeton University more national in character. For this purpose three regional trustees are now elected who represent sections of the United States not adequately represented in the personnel of the board. There are now such trustees representing the Northwest, the Far West and the South, sections from which the University is making an especial effort to increase its enrollment.

Administrative Committee

The board of trustees, consisting as it does of numerous representatives from all parts of the country, is able to meet in full session only four times a year, and most of the work is necessarily done in committees. In order to bring the work of the various committees into harmony and to make it more consecutive, an Administrative Committee, consisting of the chairmen of the finance, curriculum, and grounds and buildings committees, with three members chosen at large, meets with the President once every month.

The Faculty

Recognizing that the strength of the University depends upon the character of its faculty and that the faculty is the body best qualified to speak upon matters pertaining to education, the Princeton trustees have committed themselves "not to take any action affecting academic policy without consulting the faculty."

Cooperation and Trustees of Faculty

In order that the trustees and faculty might work together, a standing committee was appointed in 1912 which marked an important step in American university administration. This Committee of Conference, as it is called, consists of five members of the faculty elected by that body, to discuss with the curriculum committee of the trustees all questions affecting educational policy before such matters are submitted to the board. This plan had worked so well that it has been followed in many other institutions.

Joint Committees of Faculty and Students

Just as important as mutual understanding between trustees and faculty is mutual understanding between faculty and students. Here likewise important steps have recently been taken.

Discipline

Discipline is no longer being enforced by the faculty alone. The committee on discipline has been so reconstructed as to include undergraduate representatives.

Committee on Athletics

The athletic affairs of the University are controlled by a committee representing alumni, faculty and students.

Committee on Student Activities

A similar committee composed of faculty and students is now in charge of all matters pertaining to the non-athletic extra-curriculum activities of the campus.

Honor System

Questions involving a man's personal honor and honesty in examinations have for more than twenty-six years been left entirely in the hands of the students. The Princeton Honor System is one of the features of Princeton life and has successfully entrusted the student with a responsibility not usually left in his charge elsewhere.

Advisory Council of Faculty

Special committees of the faculty deal with special questions, such as entrance, course of study, standing, etc. In order to discuss questions of a general nature, an Advisory Council of the Faculty has been created. It consists of the chairmen of all the various departments and meets on call of the President.

The changes enumerated above indicate changes in the spirit of campus life. The relations between professors and students and the sense of their alliance in a common cause have of recent years become much closer. The professor who is an efficient teacher gives far more of his time to his students than formerly. In most cases he wishes to be accessible to them during the hours of the working day. For this reason, the University plans to provide in its new recitation halls offices for every professor, so that he may do his work on the campus.

Alumni Organization

The most important factor in the University's life has been the body of her alumni. They are of course represented on the board of trustees and in the faculty. In addition they are at present being organized into a national body. In this way they are in touch with the nation's problems and needs in every section of America. Every effort is made to keep them in closest possible touch with affairs at the University. To this end they have had for many years a special alumni organization, the Graduate Council, meeting twice a year. The Council strengthens in every way the relations between the alumni and the University. It encourages, for example, the class organization on which

Graduate Council

Princeton alumni loyalty rests; it promotes the establishment of regional alumni associations, supervises the University's publicity in the press and among the preparatory schools, keeps in touch with undergraduate activities and the life of the campus, and has been instrumental in raising several hundred thousand dollars for the benefit of the University in the past years. Furthermore, the Council frequently appoints special committees to consider problems of policy and organization in connection with committees of the trustees and of the faculty.

In addition to the annual reports of the President and the Treasurer of the University, alumni are informed on university matters through an organ of their own, the *Princeton Alumni Weekly.* This is organized and directed by the Graduate Council.

CHAPTER SIX

Princeton's Educational Policy

Revision of Curriculum

The range of subjects taught at the University is naturally large, for it embraces nearly every field of human endeavor. The list of courses offered to the student and the conditions under which they are to be taken cannot therefore be given in detail here. During the past year the curriculum of the University has been thoroughly revised, the details of the new scheme of studies may be obtained from the university catalogue and a booklet which will be forwarded on application to the Secretary's Office.

General Intelligence

Aside from the tendencies which have already been mentioned, the University is not committed to inculcate any particular doctrine or any one school of thought. It aims to give the student such an education as will make him familiar with human achievement in the past and place him in a position to understand and appraise critically the cross currents of the present. Its course of study is designed to teach men as far as possible to see life "steadily and whole."

Special Training in One Division

The University believes that its students should be afforded ample opportunity to prepare along general lines for their chosen professions, and to this end it allows, especially to the upper classes, a wide range of election. But it refuses to permit this freedom of individual preference either to destroy the substance of a thorough education or to prevent the acquisition of a proper mental discipline. It therefore makes two requirements of all its students. It stipulates that each of them shall, in his underclass years, master certain subjects which it deems fundamental to all real education, and that in his upperclass electives he shall take some special continuous training in one of the three divisions of studies: Philosophy, Literature, and Art; History, Politics, and Economics; Mathematics, and the Sciences.

Classics

Princeton has long been recognized as a center of classical studies. The comprehensive series of courses in Greek and Latin which were designed to give the student a thorough mastery of the languages, literatures, and philosophy underlying so much of modern culture will not in any way be curtailed; indeed, new courses on Greek life and literature are to be introduced. The recent revision of the curriculum and entrance requirements which made Greek no longer required for

entrance to the A.B. course is designed to give the system of study greater flexibility and to allow larger freedom to students of different types of mind. Without in any way lowering its standard the University wishes to put itself into closer touch with secondary education throughout the country, especially that provided in high schools of various states.

The changes made, though they provide for instruction in all important contemporary phases of history and movements of thought, were in no way designed to provide vocational or technical education in the four years' college course. The spirit underlying these changes may be made more intelligible by a statement of the principles which were brought out in the faculty committees and discussions.

Liberal vs. Vocational Education

Vocational education without the foundation of liberal training and discipline tends to limit the student to one line of thought and technical activity. He may become the master of his specialty, acquiring the art of doing one thing well and even supremely well; but his mental powers have never broken through the inevitable barriers of his narrowing studies and pursuits.

On the other hand, a liberal education, as its very name implies, tends to free the inquiring spirit of the limitations of special interests and

habits of thought, and to present a varied field of intellectual challenge which is well calculated to produce an alert, wide-ranging, resourceful mind. When the mind is thus liberated, there are no limitations which can stay its progressive development and accumulating power. With such an intellectual basis, the student can naturally turn his attention to special courses of study and investigation in any field which he may choose for his life's work. He is then prepared not only to perform adequately the daily tasks of his vocational routine, but is equal to the emergencies and the crises that may arise in his professional or technical experience. In situations wholly unfamiliar and unexpected he is not found wanting in wise initiative and resourceful effort. The test of a well trained man is his ability to deal with the unexpected.

In educational policy and departmental organization, therefore, Princeton aims to give liberal rather than vocational education, as defined above.

Stages of Student Progress

The four years of a student's college course represent stages in his intellectual growth. It has been the experience of most college teachers that the student's intellectual awakening occurs usually in his junior or senior year. Naturally his work would be most effective if this period of stimula-

tion could be brought down to an earlier stage of his college life. Therefore, at Princeton everything possible is being done to strengthen the first year of the student's university work.

Freshman Year

Intellectual Stimulation

It is essential that the student should be made to feel as early as may be that he is in an atmosphere radically different from that in which he lived in the time of his preparation for college. He is not so much a pupil who is being taught, as an independent learner. Certain subjects of study are introduced which invite questions and involve methods which he has not yet encountered in preparatory school.

Best Teachers in Freshman Year

In order to stimulate his awakening, therefore, the best teachers of the University are to devote some of their time to teaching in freshman subjects.

Advisers

For the same reason, he is allowed considerable latitude in choosing subjects that appeal to his new interests and thus arouse in him an immediate motive to learn. But in order that his selection may be intelligent and profitable, guidance is given him by an adviser, a member of the faculty whom he can consult informally at any time, with whom he can maintain unofficial and friendly relations, and with whose

assistance he maps out his courses of study. He continues throughout his college course with the same adviser.

Responsibility to World of Today

An important purpose of the freshman work is also to create in the student a sense of his responsibility to the world of today, of which he is a part. A brief statement of the plan of one of the new courses introduced into the freshman year will illustrate Princeton's method of attaining this object. The course known as the Historical Introduction to Politics and Economics is specially designed to foster this sense of responsibility, by developing intelligent interest in the questions of today, their background, and the proper method of approaching them. The elements of history, politics, and economics will be taught by a study of existing peoples in various stages of development. Geographical factors will be emphasized as a background. Conditions of life and government and their evolution by contact with more advanced civilization will be discussed. The necessity of understanding the history and point of view of the peoples, the importance of transportation and of scientific inventions, and the responsibilities of the more advanced nations will be some of the subjects treated.

Sophomore Year

Choice of Special Field

The sophomore year is the period in which students generally are confronted with the problem of deciding the special field of their life work. The nature of intellectual problems generally is put before them in a course in philosophy required of all students. Aside from this they are given a very wide field of choice.

Each department of the University is represented by a course open to all sophomores which presents the field covered by the department and the general principles of the subject. In this way the sophomore has the opportunity of learning the general range and character of each department and his aptitude for it. The only checks put upon his liberty of choice are designed to prevent the dissipation of his energy and to give him some solid preparation for later work in one of the three divisions of study already mentioned: Philosophy, Literature, and Art; History, Politics, and Economics; or Mathematics and the Sciences.

Junior and Senior Years

Training for Future Career

In his upperclass years the undergraduate's studies are usually concentrated in that special field which will afford most adequate training for his future career. The junior chooses a department or a di-

vision in which he elects at least two subjects and must continue these in his senior year.

The work of each department in these upper years is planned not to train specialists but to give the student a thorough grounding and discipline in a particular field of study. The aim is not only to impart information, but also to teach methods of investigation which will prove useful in the pursuits of later life.

Princeton believes that in connection with those subjects which are of most immediate and pressing importance today her tradition of liberal education should be continued.

It has become necessary therefore to introduce many new courses to cover the various types of problems confronting the modern student and to illustrate different methods of approaching them.

Typical Courses

An example of the extension of the work in many departments is the case of the Department of Economics and Social Institutions. The plans call for seven types of course:

1. Courses which deal with fundamental principles and the history of economic theory;

2. Courses in finance which deal with the subjects of money, banking, and public and governmental finance;

3. Courses in labor problems which deal espe-

cially with the history and present status of the relations between capital and labor;

4. Courses in transportation which deal with the history, management and public relations of railroads and with movements of domestic and foreign trade;

5. Courses which deal with the principles of accounting, corporation finance and public utilities;

6. Courses in statistics which deal with statistical methods in their application to governmental, business, and social problems;

7. Courses in social institutions which deal with the origin and history of human culture, with the family, the race problems of color and immigration, with crime, degeneracy, and social progress.

In all of these courses the aim will be to teach fundamental principles and to put before the student the problems involving their application, without attempting to give him technical knowledge primarily.

Spirit of Princeton Teaching

The spirit and purpose of the instruction at Princeton cannot be set forth in any form. Its general tenor may be gathered, however, from a statement of President Hibben to the graduating class in June, 1919:

> "Whatever develops and magnifies the spirit of man makes for the progress of the

race; whatever starves and confines that spirit, lowers humanity in the scale. Leaders of men who are themselves led by the spirit, move forward in the progressive evolution of a higher type of manhood. When they are blind to the vision of the spirit and deaf to its call, mankind is thereby degraded and becomes slave to its brute inheritance. All history is a commentary upon these two propositions. . . .

"The new world opening before you, the world of your generation particularly, calls for idealists, not the idealist who dreams dreams and sees visions forever unrealized and unrealizable, but the true idealist, who will not weakly yield to the materialistic drift of his age, but who believes in an enterprise and purpose in life which will make the possibility of a better world something more of a reality. . . .

"I appreciate the fact that life does not consist solely of great emergencies and startling events. Much of it is given necessarily to the daily routine and drudgery. Life is an integration of many small and often petty elements. But we can bring to these little things a big purpose, and through the multiplicity of wearying and often annoying details move steadily towards an inspiring goal. . . .

"Whatever be your station, you will be sooner or later called upon to deal at close

quarters with your fellow men. Your success in life will depend upon your ability to work with them and through them in mutual understanding and cooperation. The restlessness of the great masses of mankind today which is a constantly increasing menace to all our political, social and economic life, challenges the attention and serious study of the college man. The problems created by this condition cannot be solved until they are understood. Who can understand, if not the man of trained mind? There is no solution which is content to palliate symptoms merely—the causes must be discovered and the spring healed at its source."